

WHAT IS CLAIMED IS:

- Sub A5
1. A multistep method of polishing a semiconductor substrate with a polishing fluid to remove a selected amount of material from said substrate, said method comprising:
- polishing said substrate to remove a first portion of said selected amount of material by holding said substrate against a polishing pad with a polishing force while applying a polishing solution to said polishing pad;
- rinsing said polishing pad with a rinsing fluid; and
- polishing said substrate to remove a second portion of said selected amount of material by holding said substrate against said polishing pad with a polishing force while applying said polishing fluid to said polishing pad.
- Sub B1
2. The method of claim 1 wherein said polishing fluid is an unstable polishing fluid.
3. The method of claim 1 wherein said first portion and said second portion equal said selected amount.
4. The method of claim 2 wherein said unstable polishing fluid is mixed in a point of use mixing system prior to applying said polishing solution to said polishing pad.
5. The method of claim 1 wherein said rinsing fluid comprises deionized water.
6. The method of claim 1 wherein said rinsing is done while said substrate is held against said polishing pad with a 0 psi force.
- Sub A6
7. A multistep method of polishing a semiconductor substrate in an inline polishing that includes at least first and second polishing stations, wherein said first polishing station includes a first polishing pad and said second polishing station includes a second polishing pad, said method comprising:
- transferring said substrate to said first polishing;

6 polishing said substrate to remove a first portion of material by holding  
7 said substrate against said first polishing pad with a polishing force while applying a  
8 first polishing solution to said first polishing pad;  
9 rinsing said first polishing pad with a rinsing fluid;  
10 polishing said substrate to remove a second portion of material by  
11 holding said substrate against said first polishing pad with a polishing force while  
12 applying said first polishing fluid to said first polishing pad;  
13 transferring said substrate to said second polishing station; and  
14 polishing said substrate to remove a third portion of material by holding  
15 said substrate against said second polishing pad with a polishing force while applying a  
16 second polishing solution to said second polishing pad.

1 8. The method of claim 7 wherein said polishing fluid is an  
2 unstable polishing fluid.

1 9. The method of claim 7 wherein said first portion and said second  
2 portion equal said selected amount.

1 10. The method of claim 8 wherein said unstable polishing fluid is  
2 mixed in a point of use mixing system prior to applying said polishing solution to said  
3 polishing pad.

1 11. The method of claim 7 wherein said rinsing fluid comprises  
2 deionized water.

1 12. The method of claim 7 wherein said rinsing is done while said  
2 substrate is held against said polishing pad with a 0 psi force.

1 13. The method of claim 7 wherein said substrate is transferred to  
2 and polished at said second polishing station before being transferred to and polished at  
3 said first polishing station.